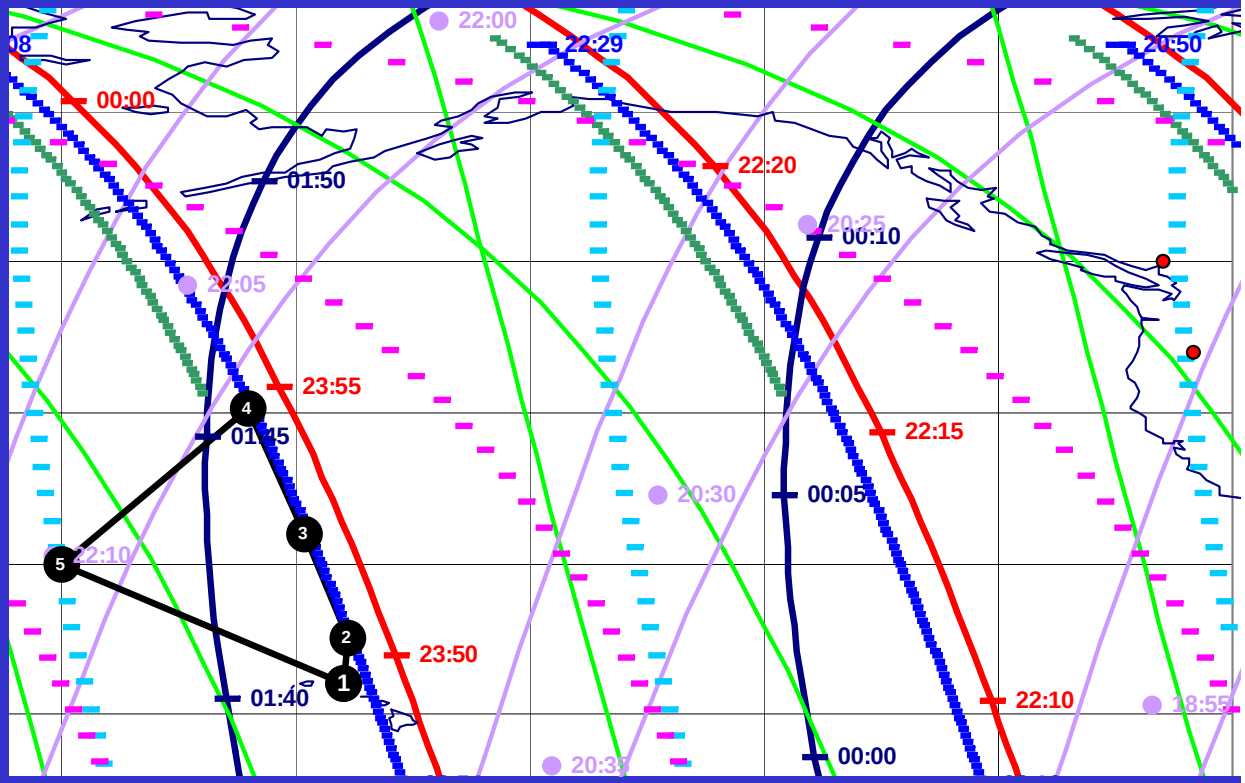
Plan for INTEX-B flight#11 – Hawaii local 1 on Sunday 4/23 updated Saturday 4/22 @22Z

Objectives:

- Asian plumes at high and low altitudes
- TES and MLS validation

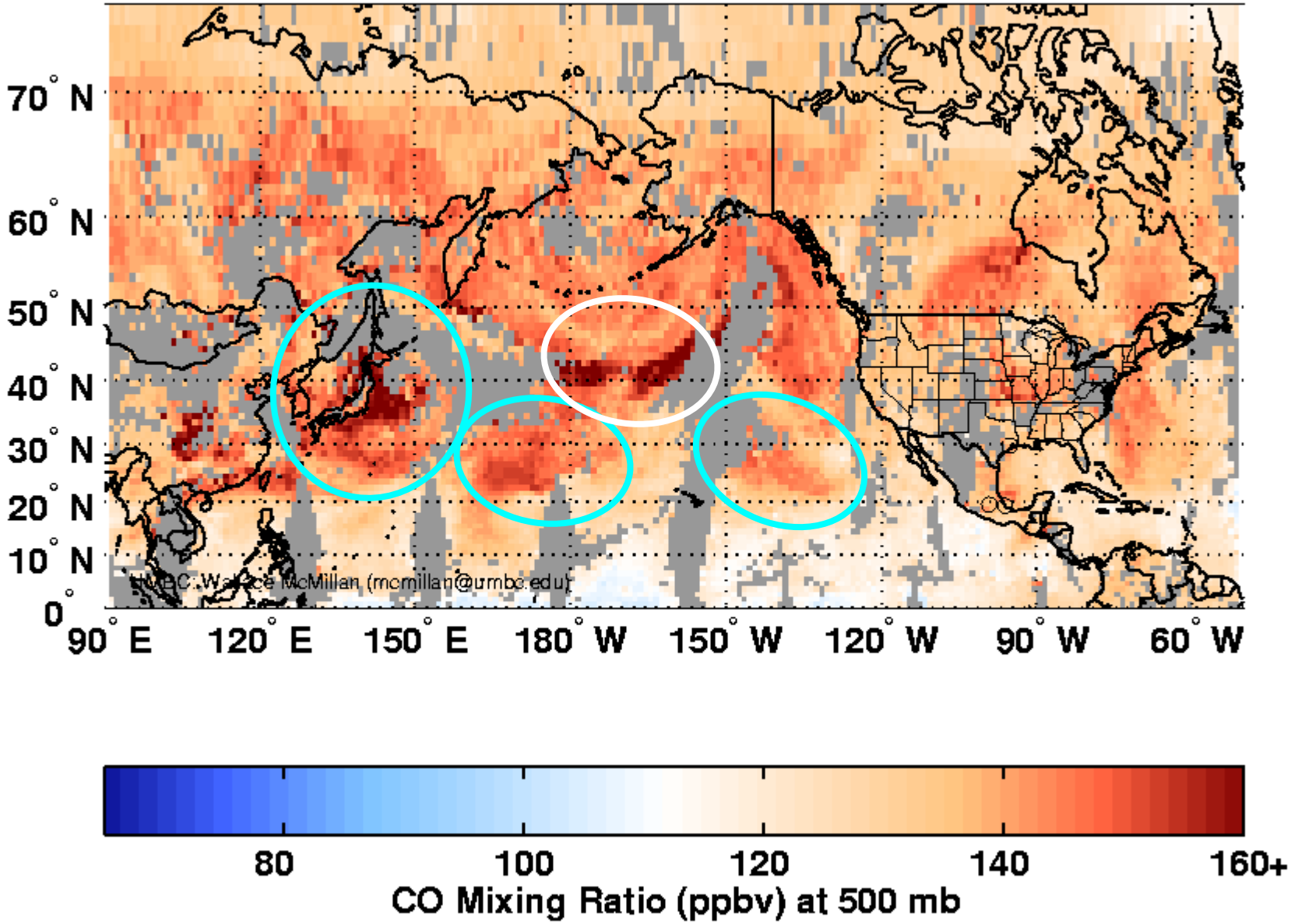


- Points 1-2: get on TES orbit track (notice MLS track in red nearby)
- Points 2-3: vertical profiling along TES track
- Point 3: TES validation spiral (upward)
- Point 3-4: vertical profiling along TES track, focus on high altitudes
- Points 4-5-1: vertical profiling in Asian plumes

Take-off time 1150 local, 9-hour flight

Asian CO heads towards Hawaii

Local AP (day+night) AIRS CO at 500 mb on 20060421

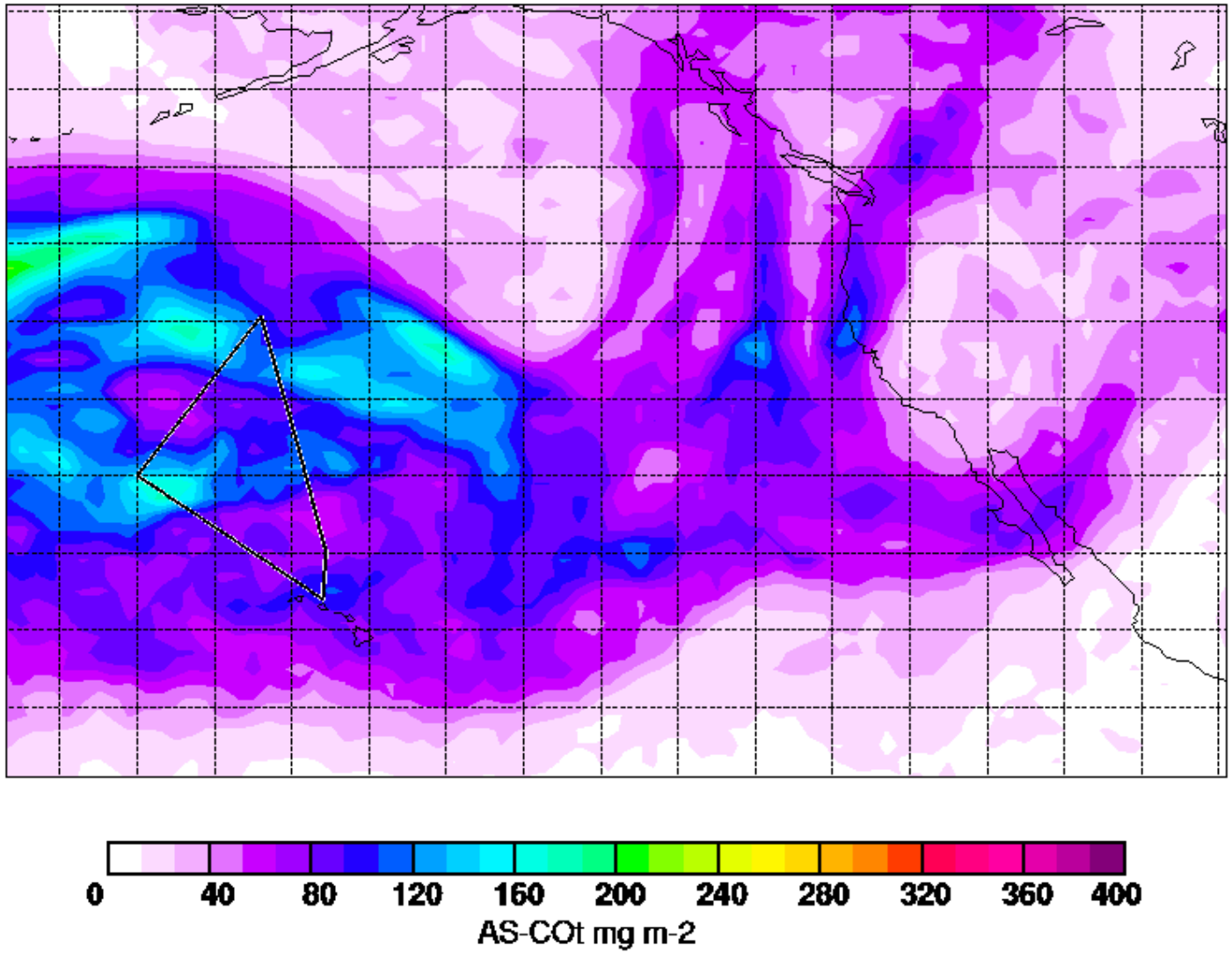


Total column of species AS-COt for age class 0 - 20.00 DAYS

Latest analysis time 20060422. 0 Actual time 20060424. 0

Mean value 0.414E+02 Maximum value 0.795E+03 Minimum value 0.000E+00

Distance of grid lines 5.0 deg

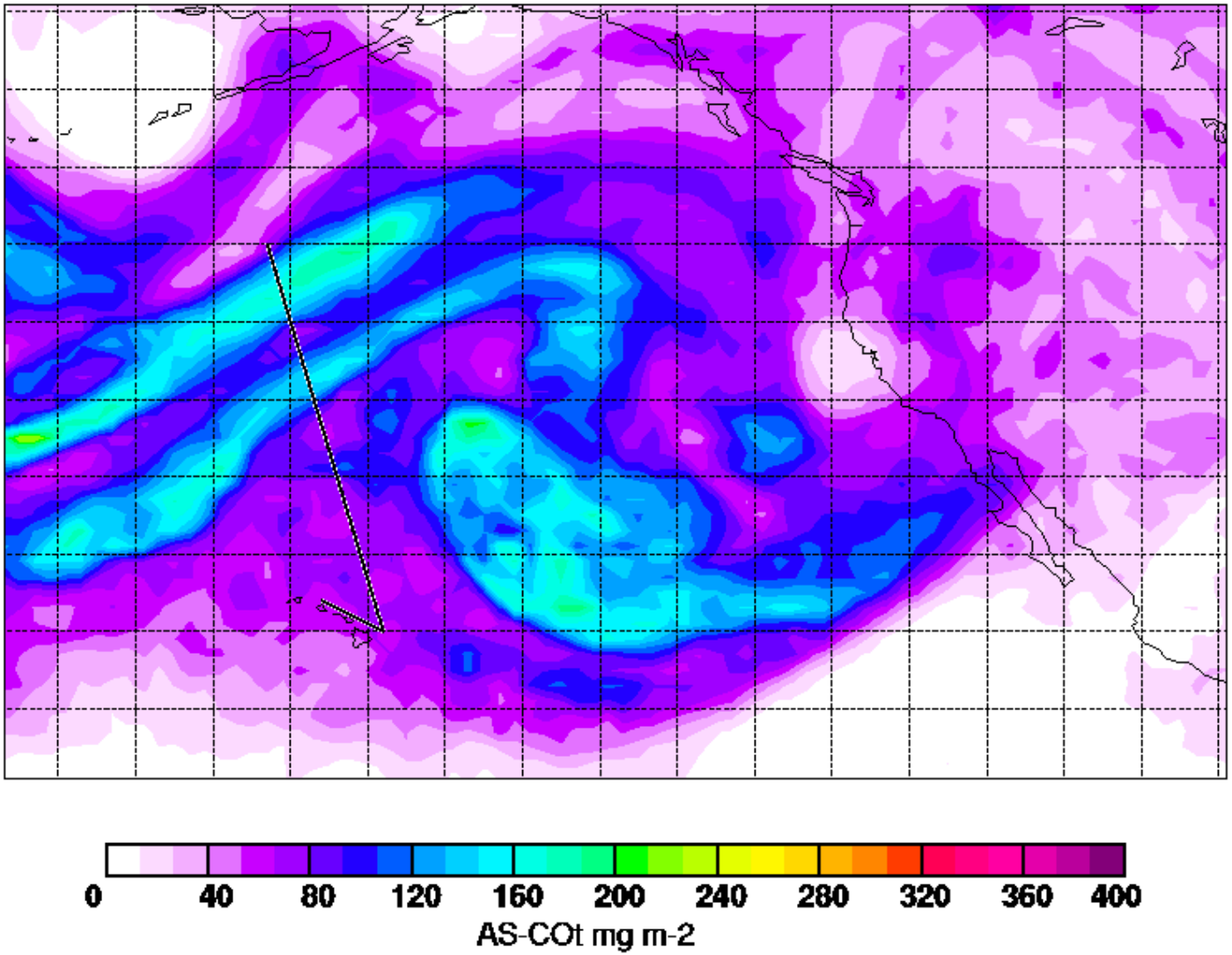


Total column of species AS-COt for age class 0 - 20.00 DAYS

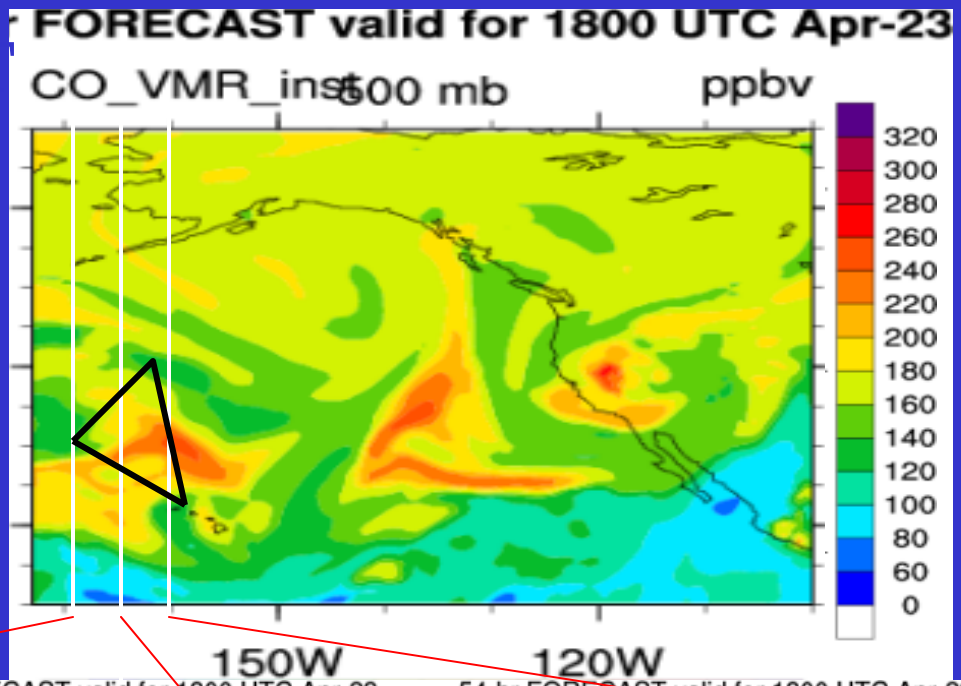
Latest analysis time 20060422. 0 Actual time 20060426. 0

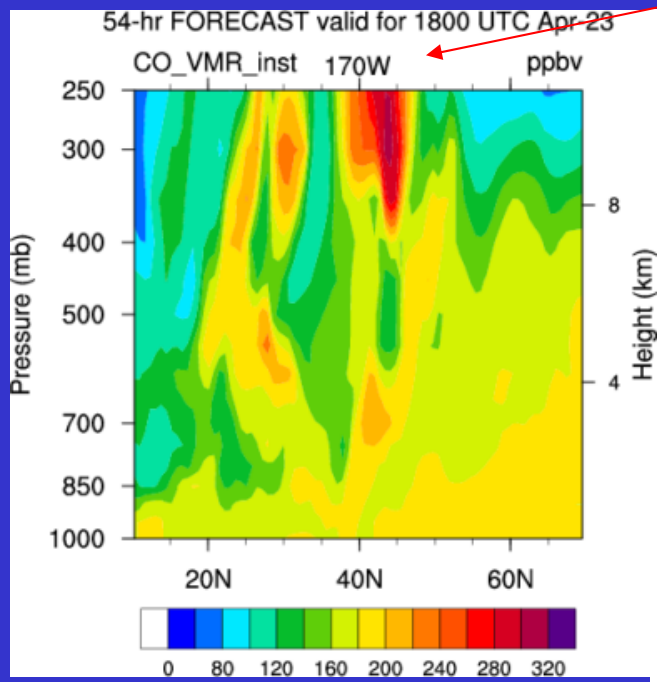
Mean value 0.416E+02 Maximum value 0.788E+03 Minimum value 0.000E+00

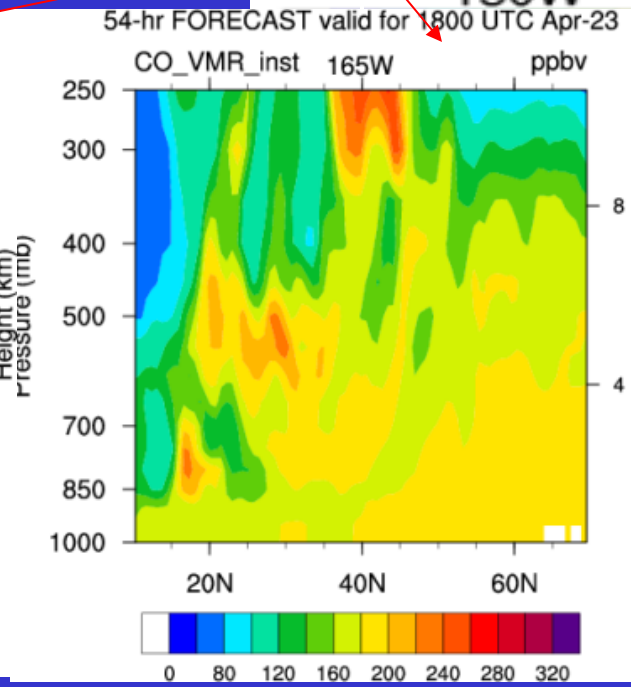
Distance of grid lines 5.0 deg

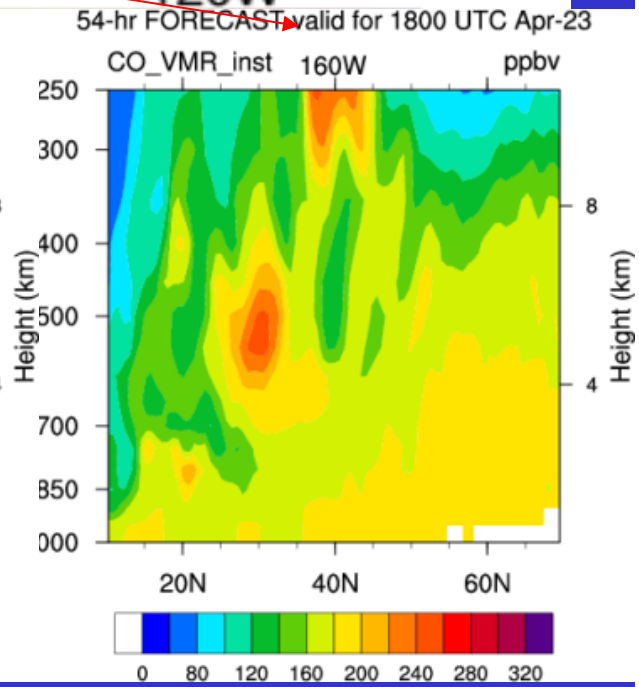


Vertical slices show 2 plumes over HI and to the west at different altitudes

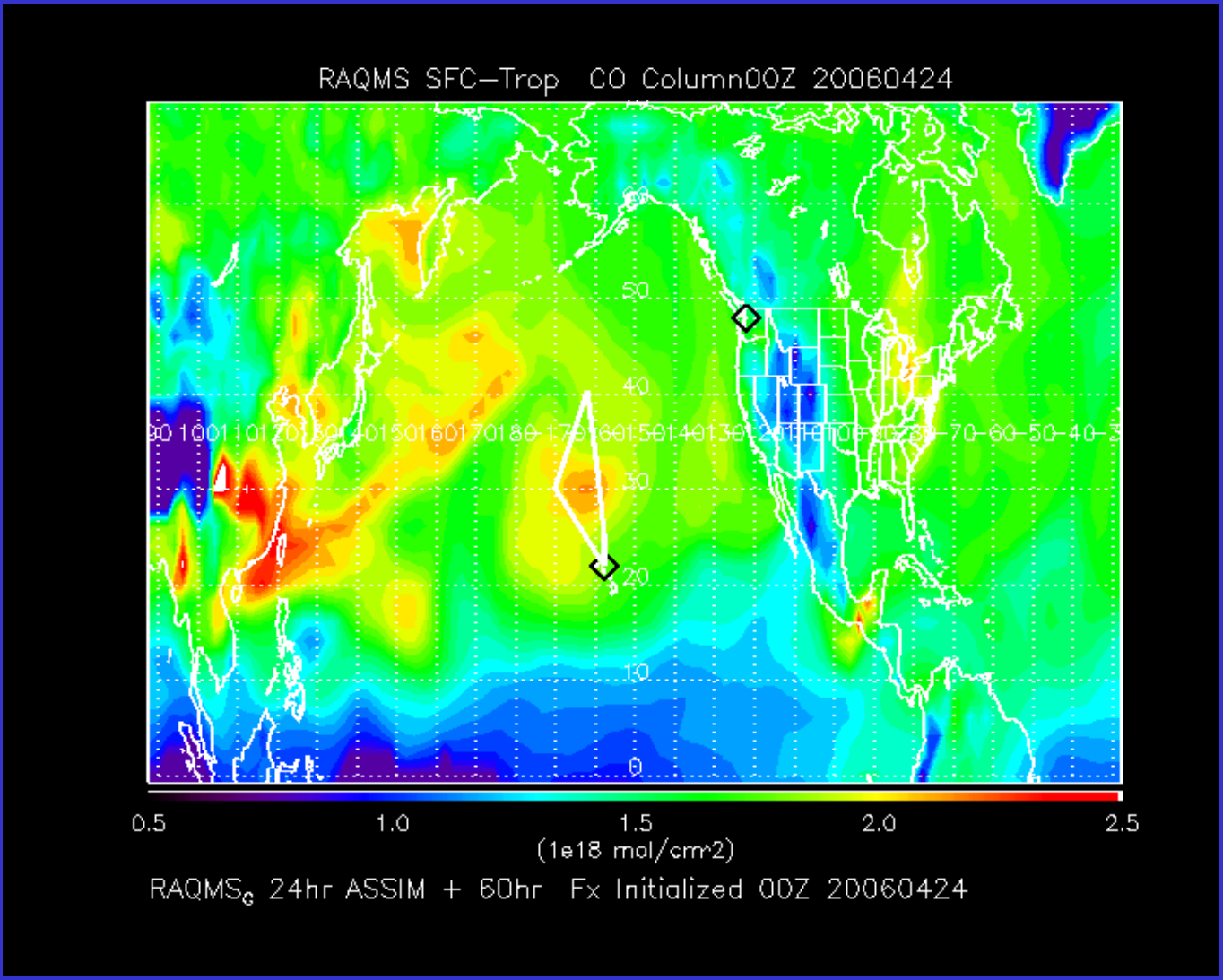








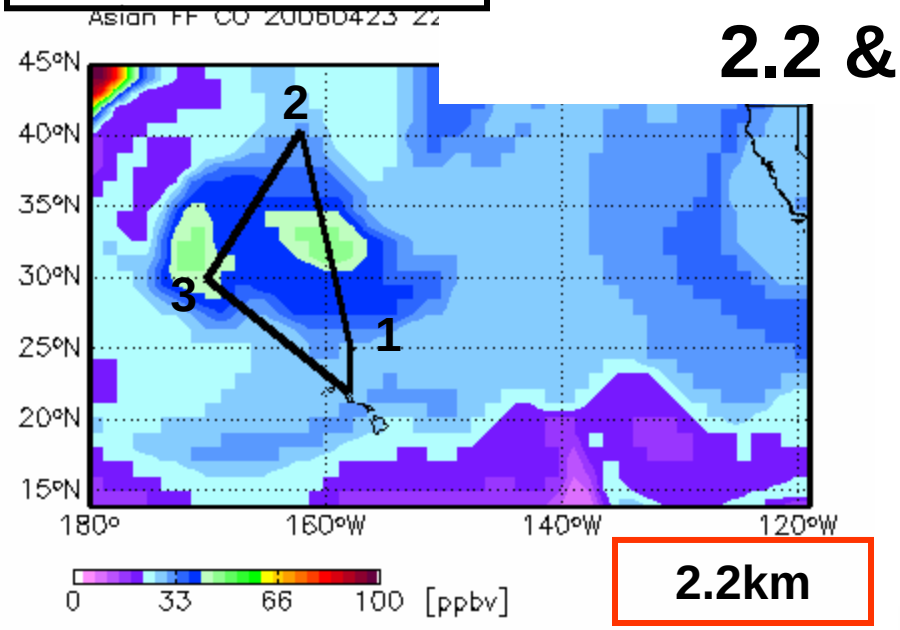
RAQMS Column CO 60hr Fx valid 00Z 04/24 (2PM Sun. 04/23 Hawaii local)

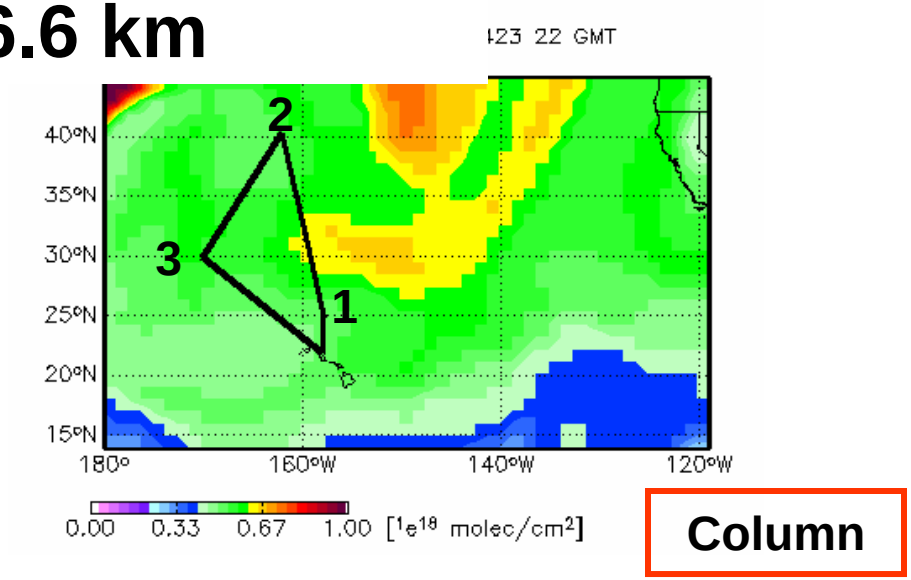


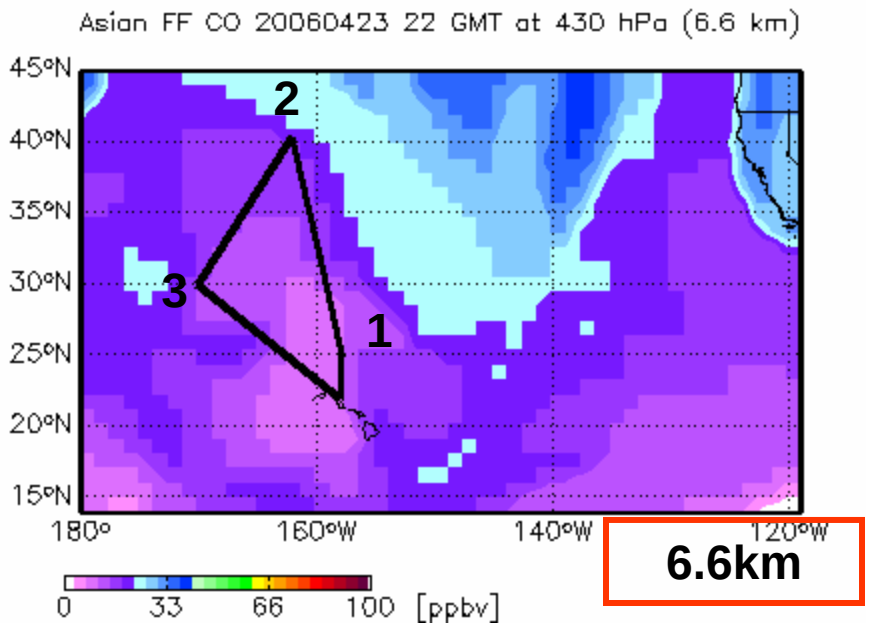
GMAO Asian CO:

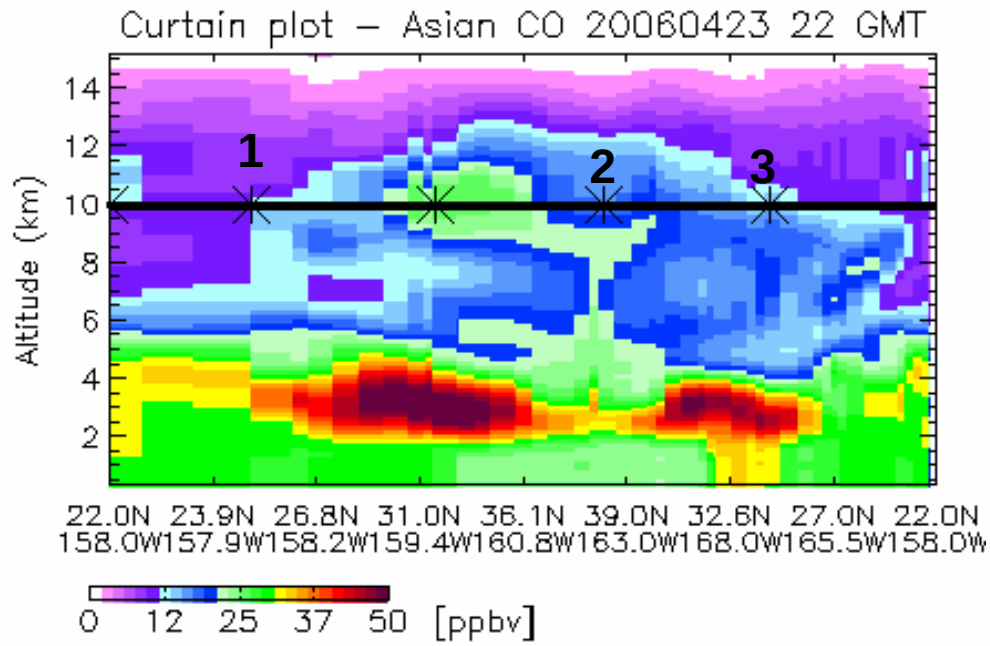
2.2 & 6.6 km

Sun 4/23 22Z

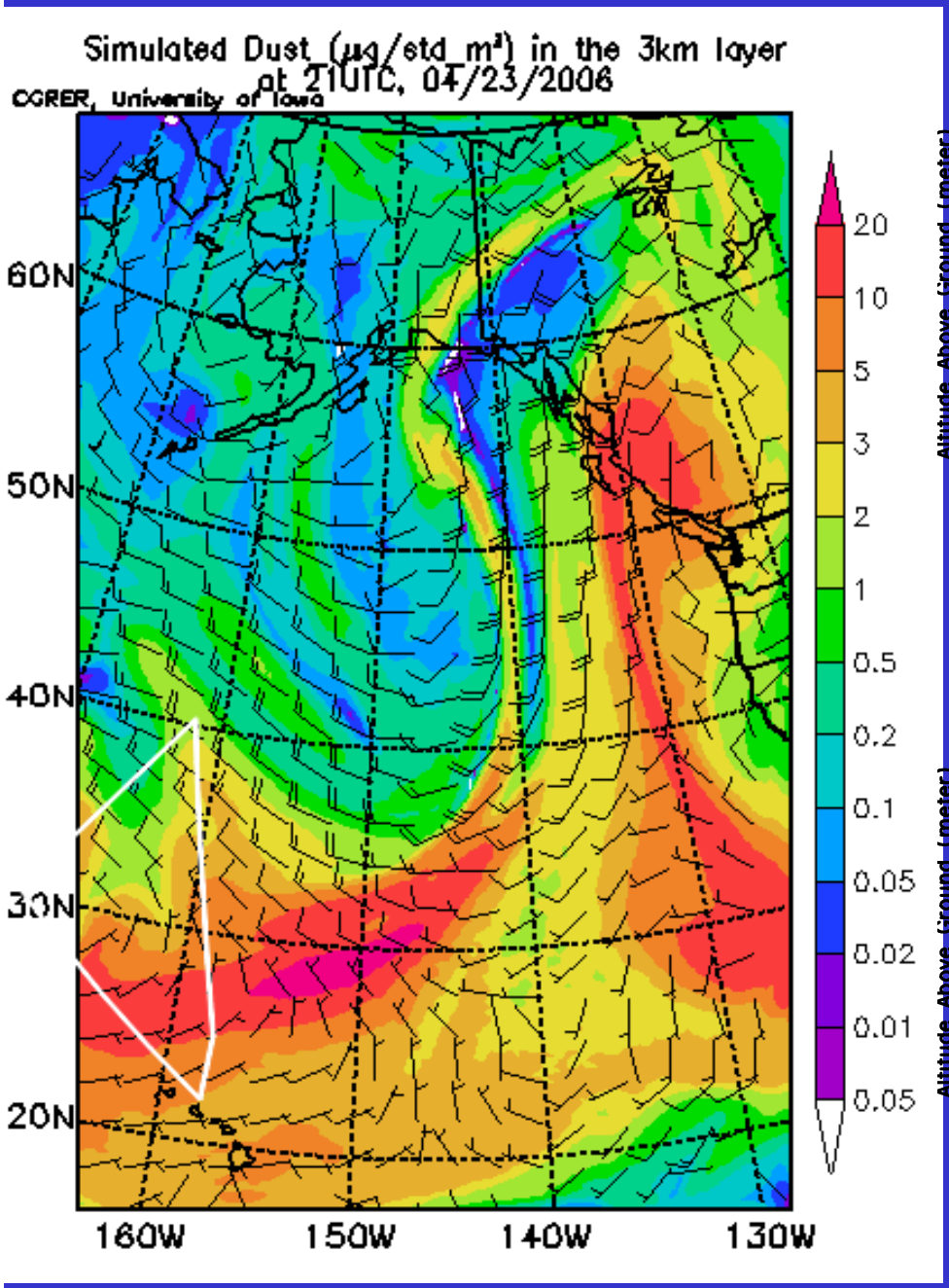


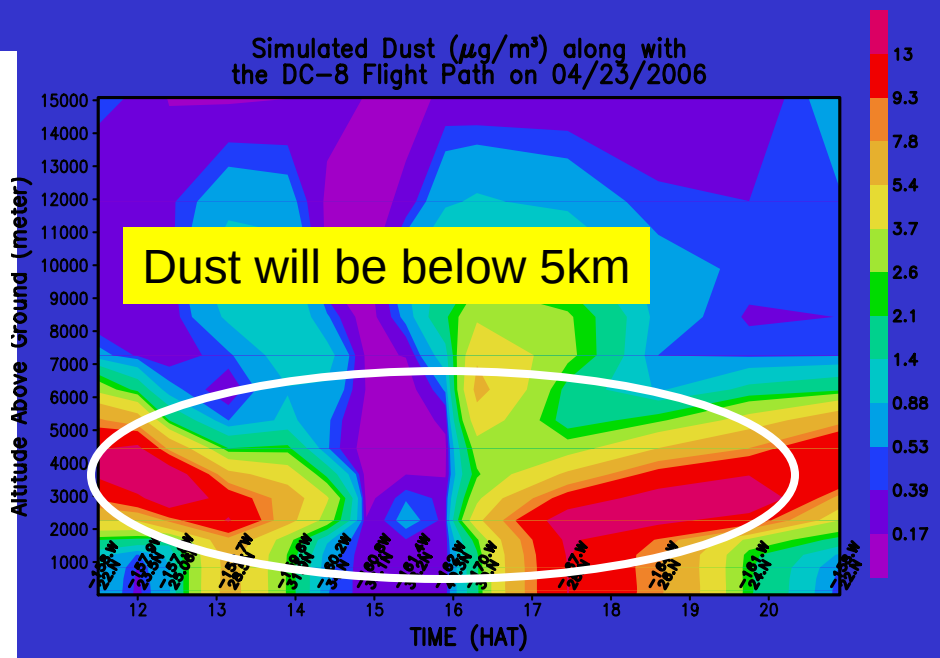




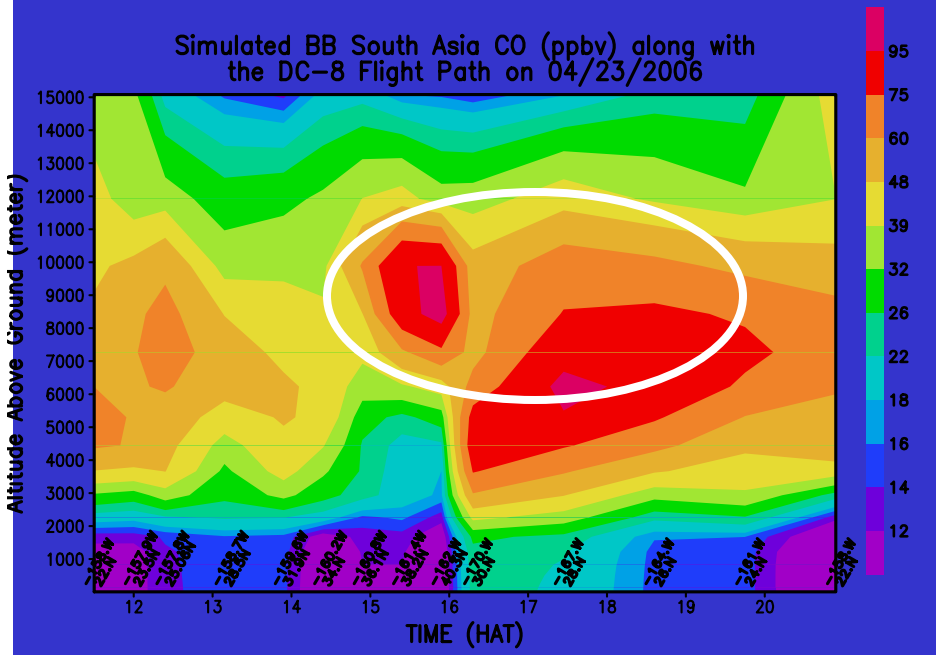


Initialized 4/22 0Z

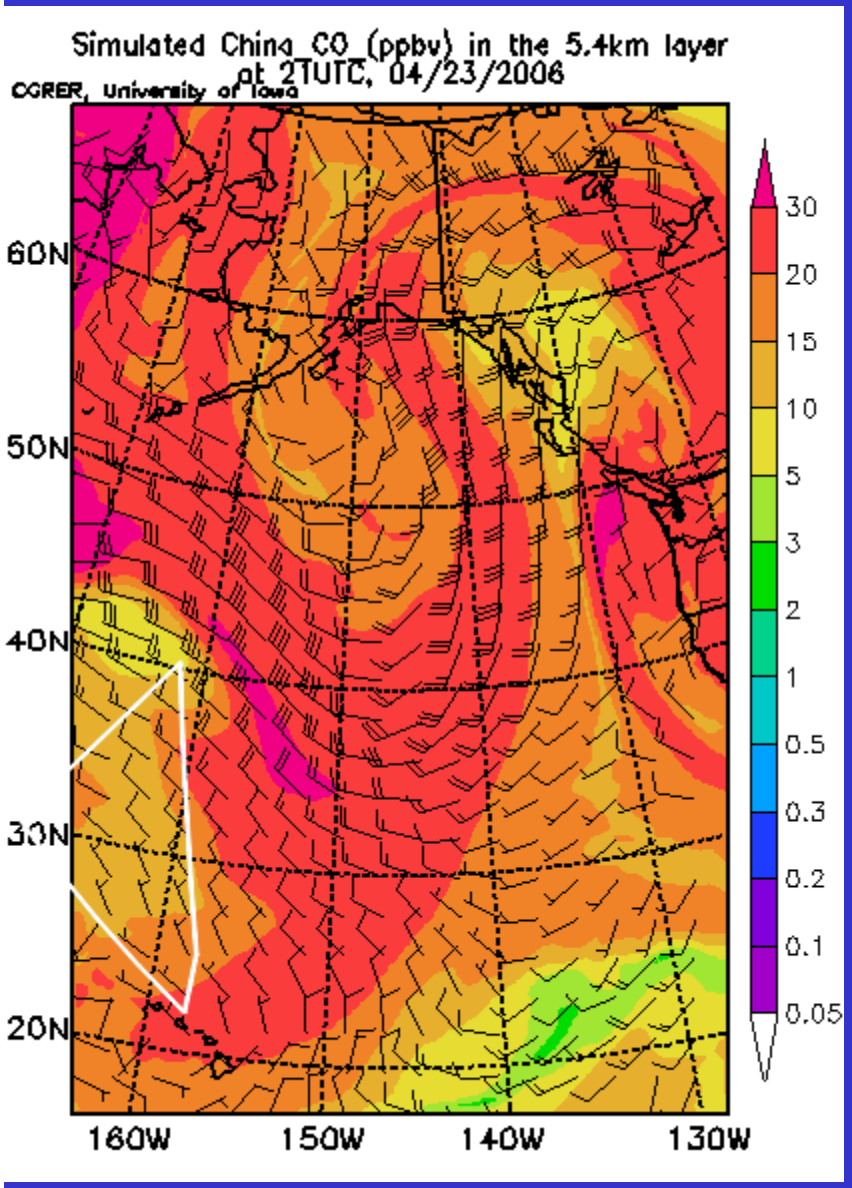




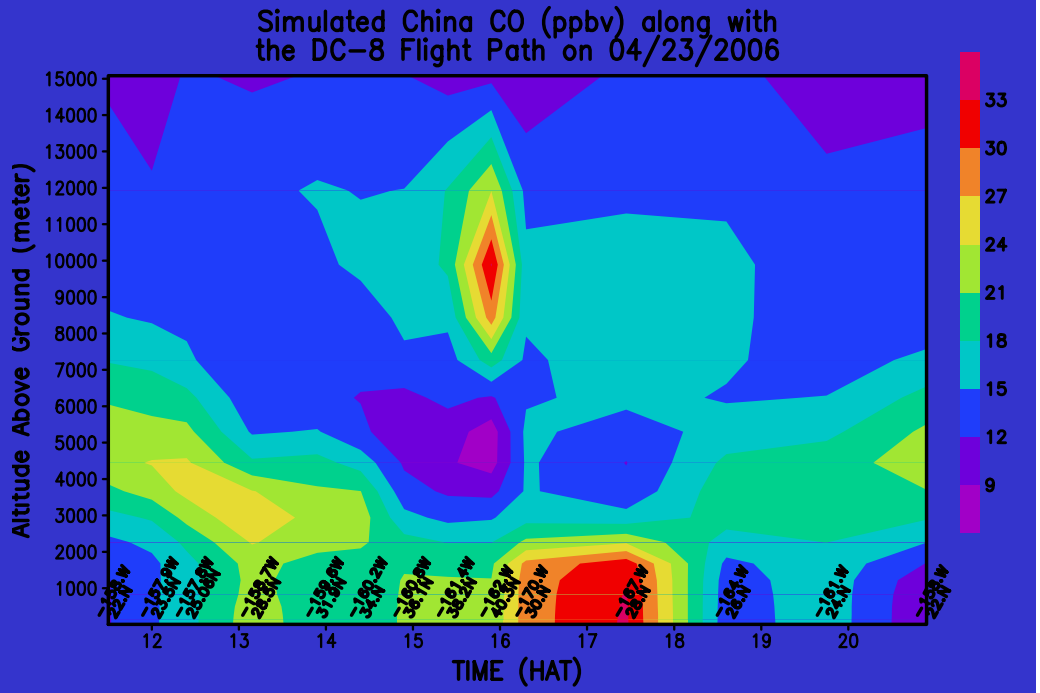
Dust will be below 5km



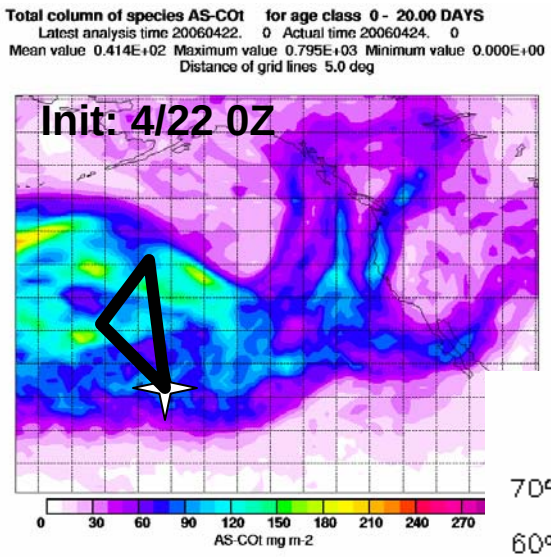
BB plume will be in high altitudes

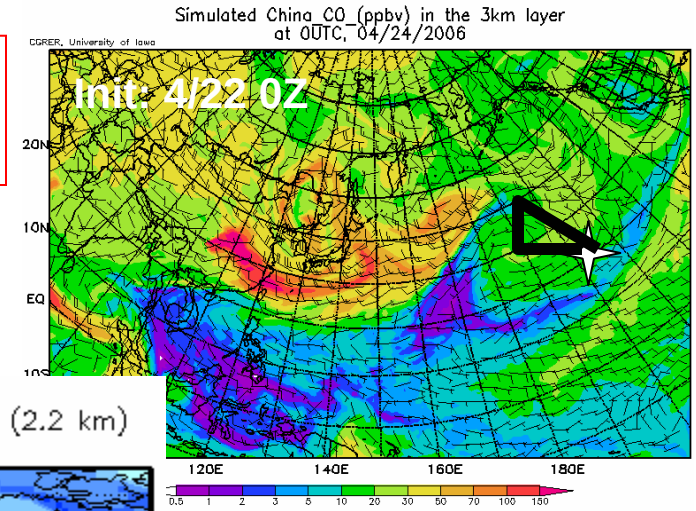


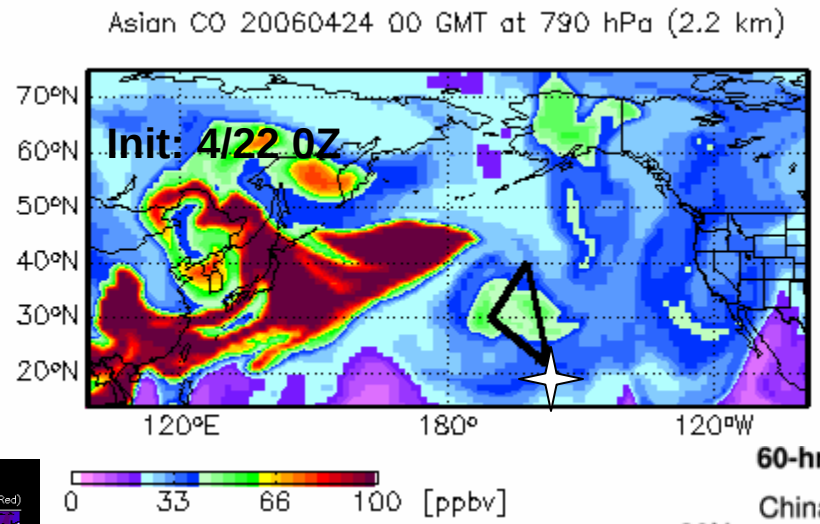
Chinese Pollutants will be in the high altitudes for proposed DC-8 Sunday flight.

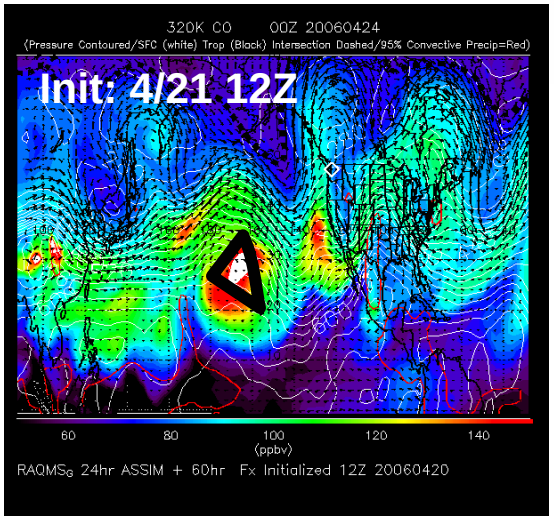


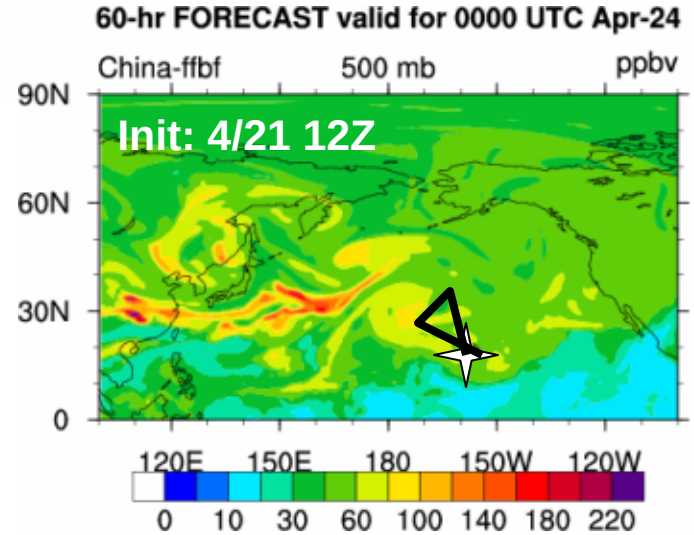
Forecast comparison for Sunday flight



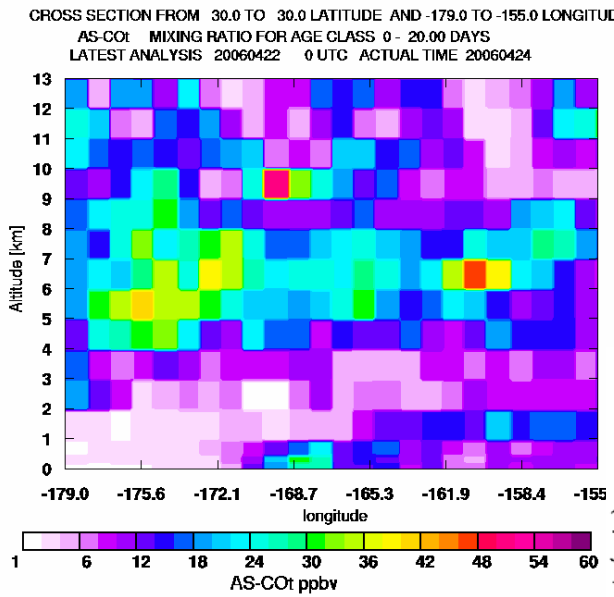


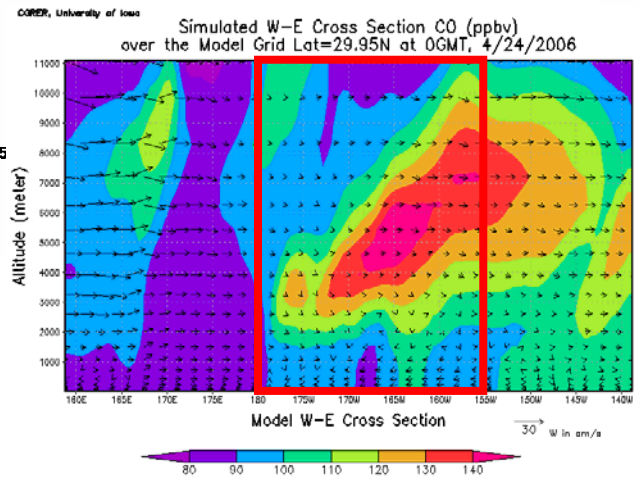


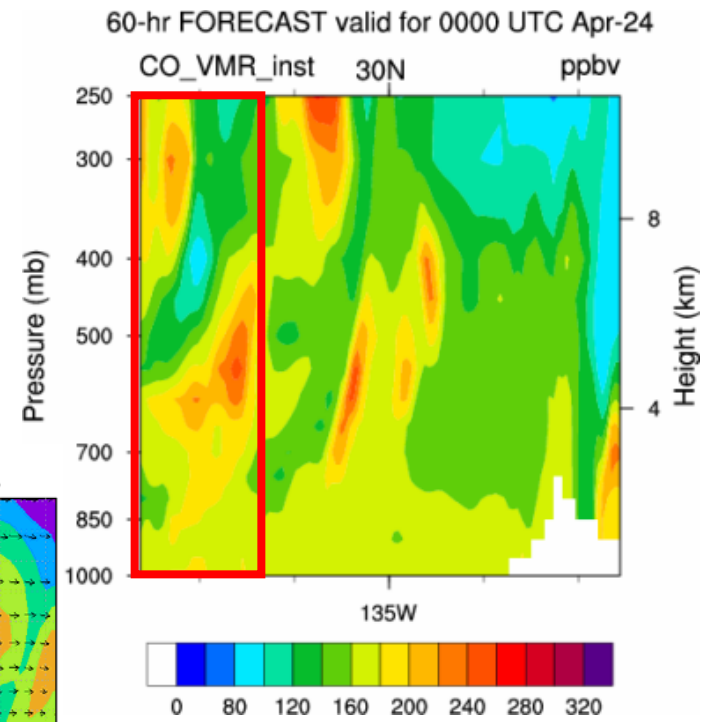


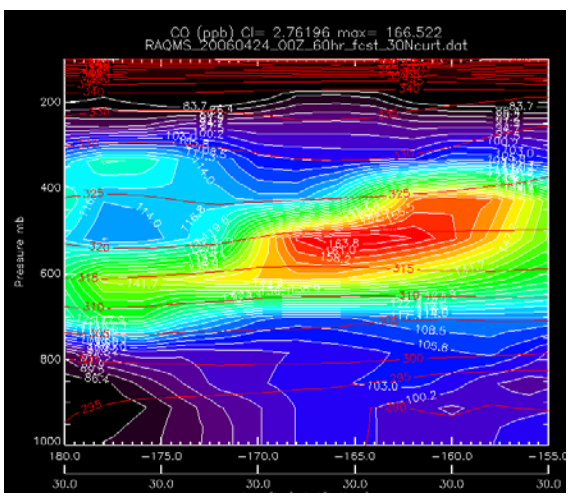


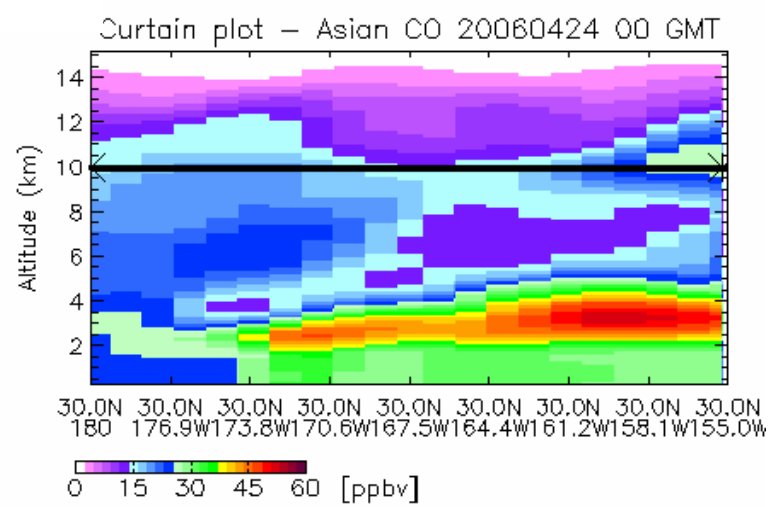
Slice at 30N, 180:155W



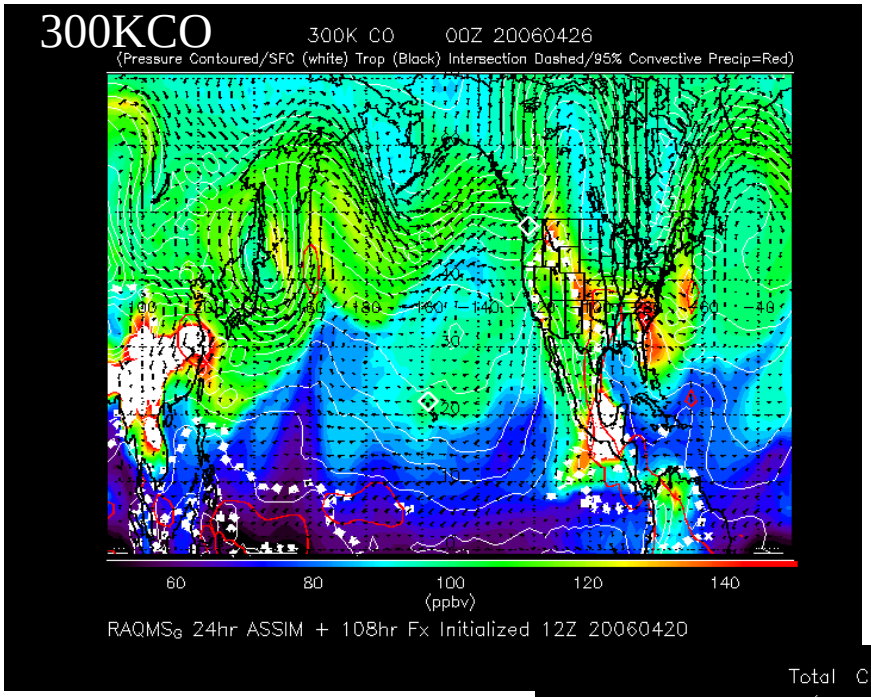


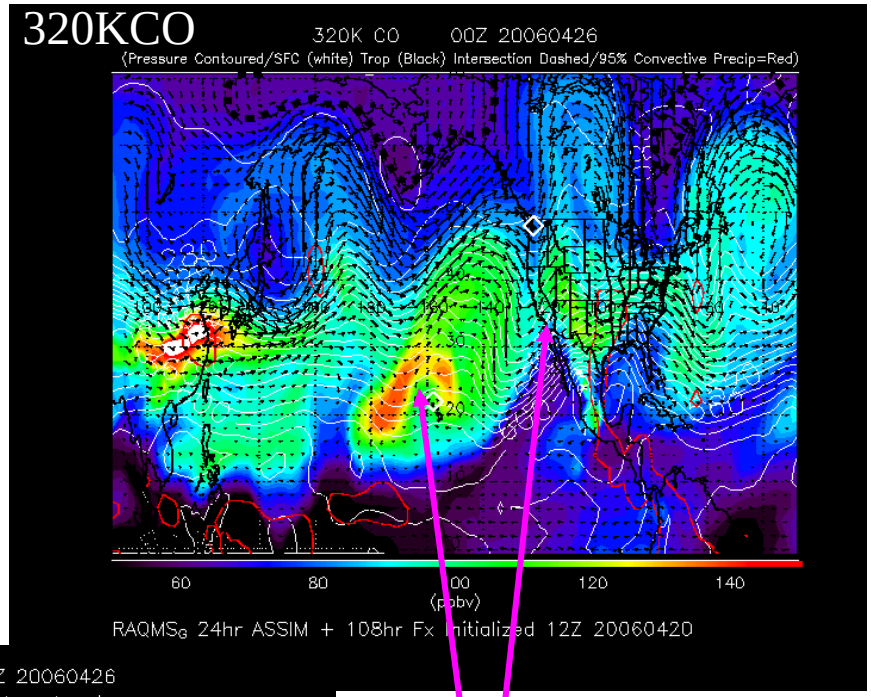


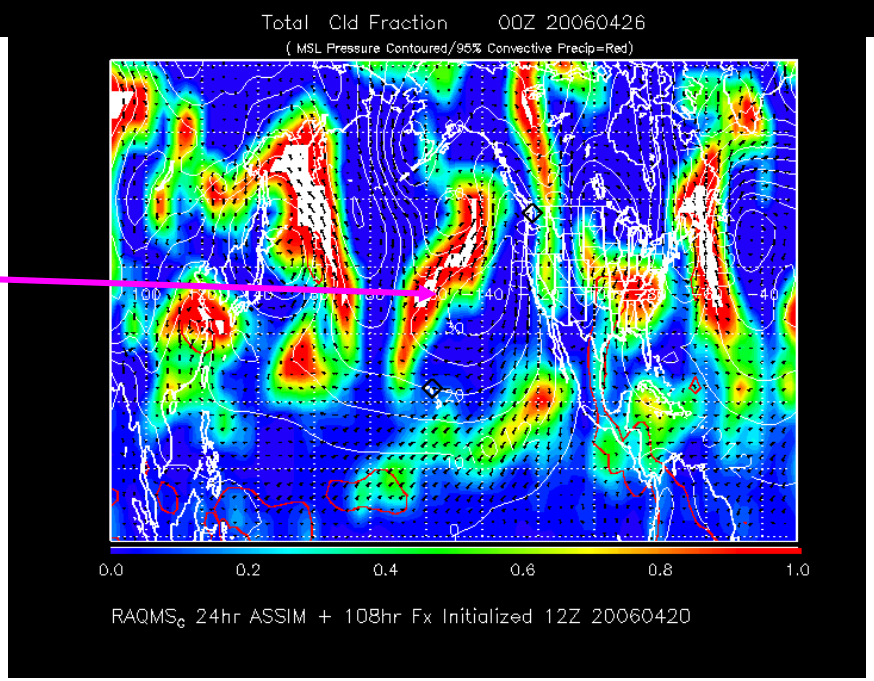




Ahead: RAQMS 108hr Fx valid 00Z 04/26 (2PM Tues. 04/25 Hawaii local)





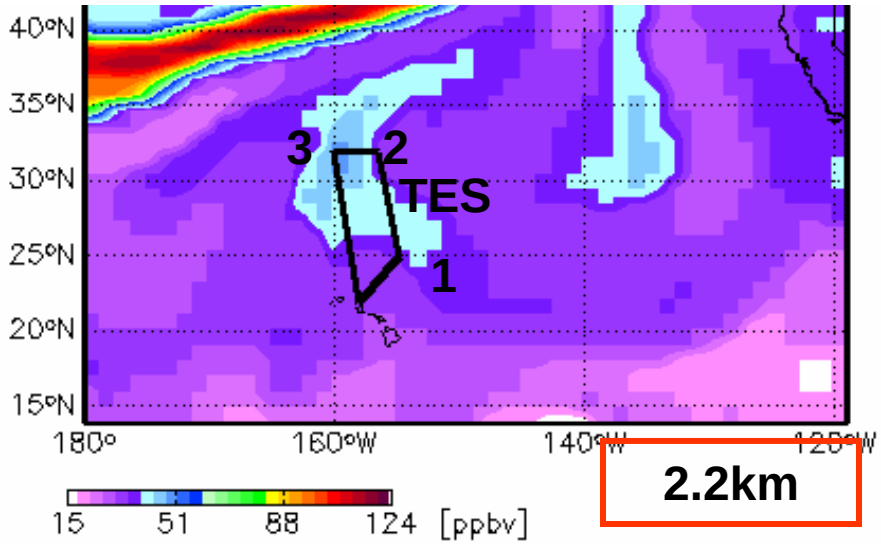


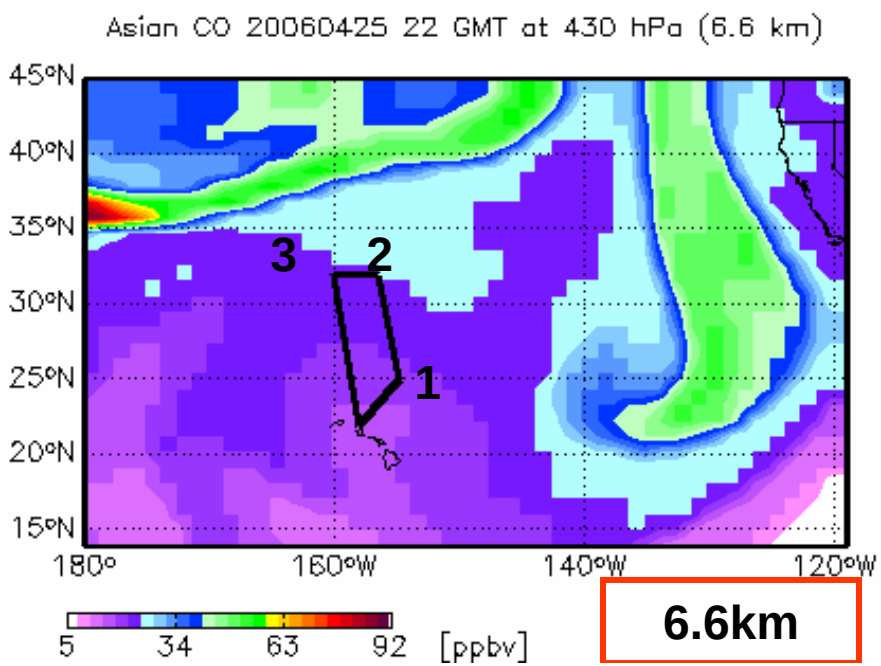
Clouds building to North and West of Hawaii

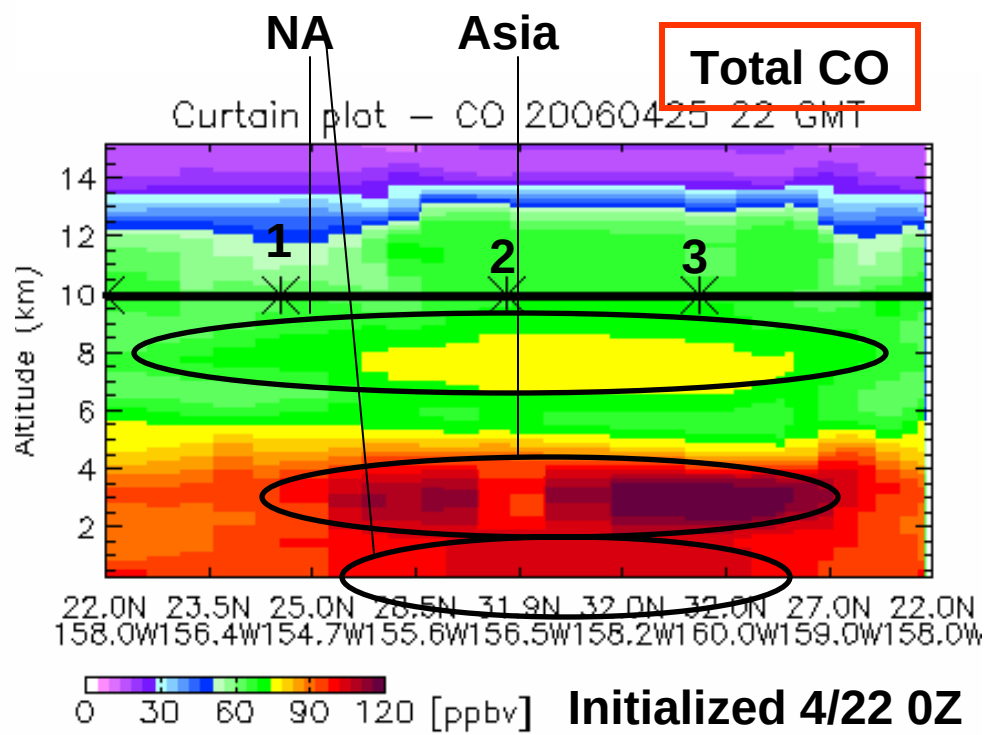
Current plume stagnating and aging, some advection toward US Pacific coast

Future Flights: GMAO Asian CO:

Tue 4/25 2.2 & 6.6 km



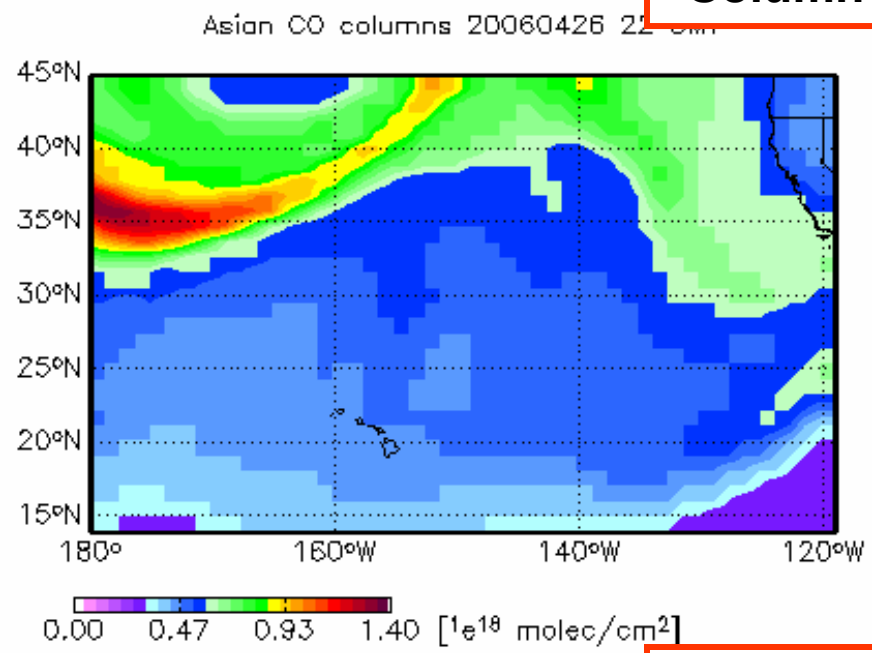




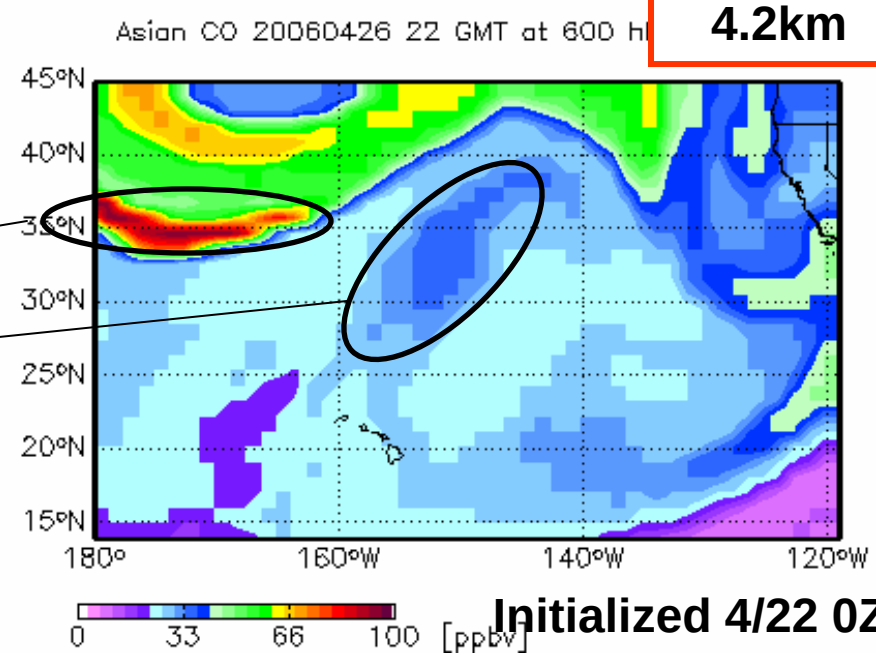
Future Flights: GMAO Asian CO:

Wed 4/26

Column



4.2km



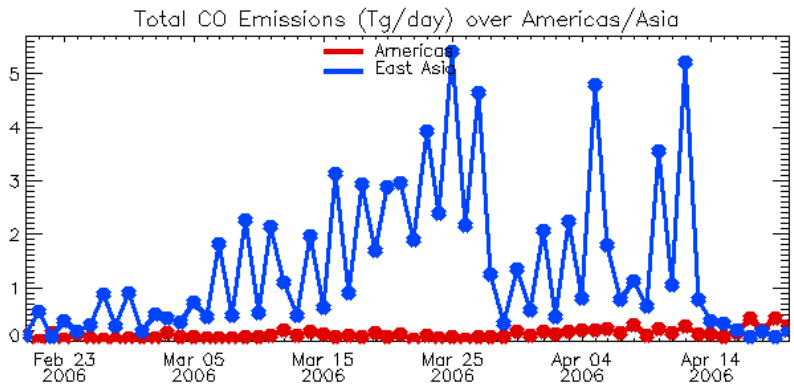
Fresh Asian outflow

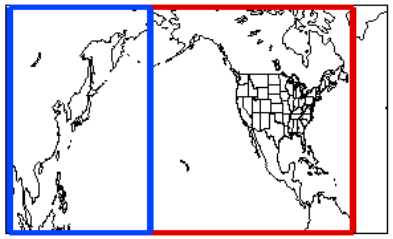
Aged Asian Plume

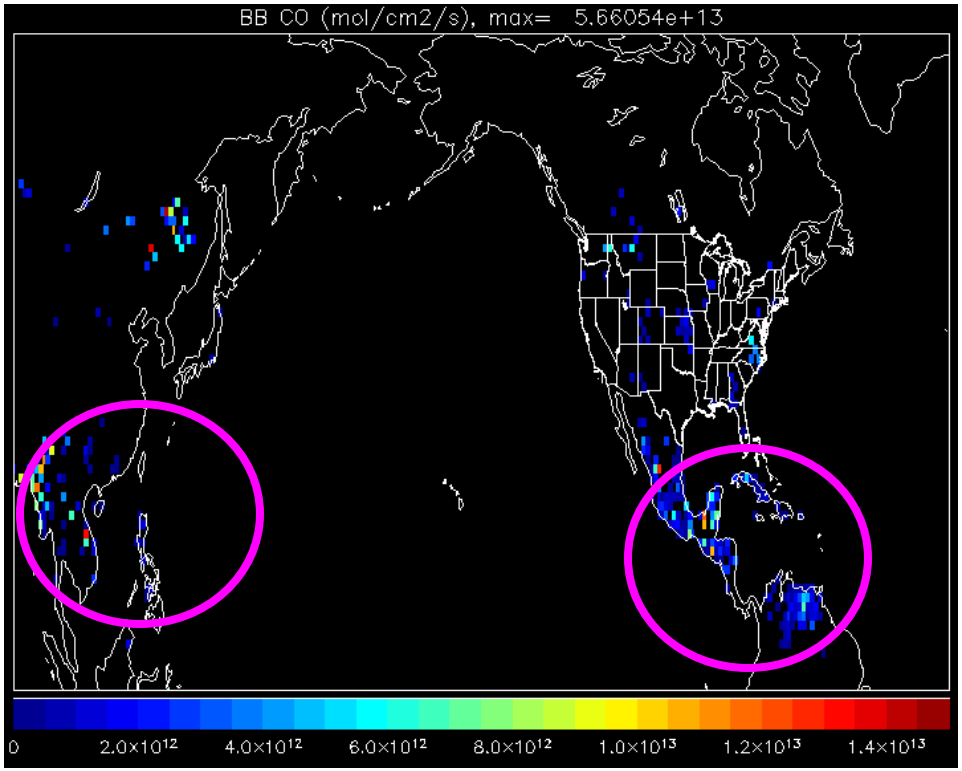
Initialized 4/22 0Z

Asian burning continues to decline, Americas burning is increasing

Some burning in NE Asia but advection is southward







Largest emissions in SE Asia and central America